

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-10 (cancelled).

11. (New) A device for longitudinal guidance of a motor vehicle, comprising:
a driver assistance system which outputs a brake request signal to a brake control unit, the driver assistance system being configured to output the brake request signal in a form of a distance signal which specifies a distance to be traveled by the vehicle within which the vehicle is to reach a predefined target velocity;
wherein the brake control unit includes a conversion unit for converting the distance signal into a brake operation signal.
12. (New) The device as recited in claim 11, wherein the target velocity is predefinable by the driver assistance system.
13. (New) The device as recited in claim 11, wherein the target velocity is zero.
14. (New) The device as recited in claim 11, wherein the conversion unit is configured to convert the distance signal into a setpoint braking deceleration.
15. (New) The device as recited in claim 14, wherein the conversion unit is configured to generate the brake operation signal in such a manner that the braking deceleration of the vehicle is regulated to the setpoint braking deceleration.
16. (New) The device as recited in claim 14, wherein the conversion unit is configured to control the brake pressure acting on wheel brakes of the vehicle as a function of the setpoint braking deceleration.
17. (New) The device as recited in claim 11, wherein the conversion unit is configured to calculate a distance signal based on a measured actual braking deceleration and a vehicle

velocity and report it back to the driver assistance system which specifies a predicted distance or a minimum distance required at a maximum achievable braking deceleration until reaching the target velocity.

18. (New) The device as recited in claim 17, wherein the driver assistance system has a limiting function which limits possible values for the distance signal to be output so that the distance signal deviates from the reported distance signal by less than a predefined tolerance value.

19. (New) The device as recited in claim 11, wherein the driver assistance system is configured to communicate with the brake control unit via a distance interface via which the distance signal can be output, and via another interface via which another brake request signal can be output, and the driver assistance system has an interface selector for selecting the interface to be used for output of the brake request signal.

20. (New) The device as recited in claim 19, wherein the brake control unit is configured to generate a corresponding actual signal for the additional brake request signal and to report it back to the driver assistance system via the additional interface.